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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,054	08/26/2003	Rolf Bruck	E-80656	7377
24131	7590	12/01/2005	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			MAZZUCA JR, DOUGLAS	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/650,054	<b>Applicant(s)</b> BRUCK, ROLF	
	<b>Examiner</b> Marc Jimenez	<b>Art Unit</b> 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 11-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/23/05 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 1-10** are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 1-10 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed 8/3/05. In that paper, applicant has stated that "Step 'i' of claim 1 now recites that at least some of the sheet metal layers must be corrugated to form channels through which a fluid can flow. Therefore, the corrugating in step 'd' is not optional." (see page 12, lines 6-9 of the response filed 8/3/05), and this statement indicates that the invention is different from what is defined in the claim(s) because claim 1 specifically recites "if required, corrugating at least a portion of the section". "if required" is an optional limitation because there could be a) a

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corrugating step performed or b) no corrugating step performed. Therefore, applicant's argument that step "d" is not optional is unclear because if there is no corrugating step performed, it is not understood how step "d" is not optional.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-8** are rejected under 35 U.S.C. 102(b) as being anticipated by Toshiaki (JP 01012018).

Toshiaki discloses forming a honeycomb structure having a measurement sensor (40) and sheet metal layers forming a body structure (21) which allowing fluid to flow through the body structure, the body having a cohesive free volume (50) receiving said measurement sensor (40) comprising:

selecting a section of a sheet metal strip from a supply roll (22),

reading/identifying a hole position & edge (50-52) from a memory (i.e. "specified intervals" implies that the positions are measured and predetermined, and therefore are from "memory") to be formed in the sheet metal,

constructing the holes & edges (50-52) at the associated hole position,

repeating this process for the desired number of layers,

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winding said sheets into a honeycomb structure with smooth (21) and corrugated metal layers (22) forming channels (30) through which a fluid can flow,

introducing the structure into a casing tube (11),

introducing the measurement sensor (40) into the structure & tube (see Figures 1-5).

Regarding claims 2-8, Toshiaki discloses the hole positions forming a cohesive cavity in the honeycomb body having a geometry which corresponds to the sensor's dimensions (40) (Figure 1). It is inherent that the cavity be larger by a predetermined tolerance (gathered both from empirical data i.e. measurements, and formed in a mathematical model to match different sensor sizes to different hole configurations) in order for the sensor to be accepted within the cavity. If the cavity were formed too small, the sensor would not fit within the honeycomb body making the structure useless, meanwhile if the cavity were formed too large the sensor would not mount properly.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 9 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiaki.

Toshiaki discloses the claimed invention except for explicitly stating that the holes are of

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an oval shape, and the sensor is an HC or lambda sensor. It would have been an obvious matter of design choice to form oval holes, and use such a sensor, since applicant has not disclosed that such a hole/sensor solves any stated problem or is for any particular purpose, and it appears that the invention would perform equally well with the hole/sensor of Toshiaki.

### ***Response to Arguments***

8. Applicant's arguments filed 8/3/05 have been fully considered but they are not persuasive.

9. In response to applicant's argument that step "d" is not optional, see the 35 USC 112<sup>nd</sup> paragraph rejection above.

10. Applicant argues that "Toshiaki discloses that the holes are drilled in the flat metal plate and the corrugated metal plate in the same operation. Accordingly, the holes are drilled in the corrugated metal plate after it has been corrugated." However, the claims do not preclude drilling holes after the metal plate has been corrugated. The step in claim 1 of "constructing at least one hole with the hole edge in the sheet metal layer at the at least one associated hole position and, if required, corrugating at least a portion of the section" is considered to be met by Toshiaki because in Toshiaki, it is not required to corrugate at least a portion of the section after drilling the holes because it has already been corrugated.

11. Applicant argues that Toshiaki does not disclose that the corrugated plate is corrugated after a flat sheet has a hole formed therein, however, the claims do not require this specific limitation.

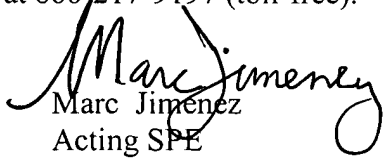
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***Contact Information***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is (571) 272-4530. The examiner can normally be reached on Monday-Friday.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Marc Jimenez  
Acting SPE  
Art Unit 3726

MJ  
11/23/05

